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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/153,781	09/16/1998	LOUIS B. ROSENBERG	IMM1P053	6020

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IMMERSION CORPORATION
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EXAMINER

BELL, PAUL A

ART UNIT	PAPER NUMBER
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2675

DATE MAILED: 02/26/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/153,781

Applicant(s)

ROSENBERG ET AL.

Examiner

PAUL A BELL

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/13/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-8, 11-15, 17-25, 27-31, 33-56, 58-70, 72-76, 78-82, 84-90 and 92-100 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2, 12, 17, 24, 27, 30, 38, 50, 58, 75, 89 and 97 is/are rejected.
- 7) ☒ Claim(s) 3-8, 11, 13-15, 18-23, 25, 28, 29, 31, 33-37, 39-49, 51-56, 59-70, 72-74, 76, 78-82, 84-88, 90, 92-96, 98-100 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

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DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 10/15/2002 paper #13 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each foreign patent; and each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

3. Claims, 24, 30, and 50 are rejected under 35 U.S.C. 102 (e) as being anticipated by Woolston (6,162,123) (11/25/1997). (note independent claims 12, 17, and 27 are not being rejected here because they have a priority date of 6/14/1996 or 8/1/1996 but their dependent claims 24, 30, and 50 have a priority date of 9/16/1998 and therefore are rejected on prior art)

With regard to claim 12 Woolston teaches, a system comprising: first computer means coupled to network means (figure 9a item 704); and second computer means coupled to said network means (figure 9a, item 706), said second computer means comprising a visual display means (figure 3, item 205) comprises means for displaying a graphical environment, wherein said graphical environment comprises said visual information transferred from said first computer means to said second computer means, and human/computer interface means (figure 3,

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item 200), said second computer means further including means for displaying an image on said visual display means (fig 3, item 205), said second computer means further including means for interpreting visual information and feel sensation information repeatedly transferred to said second computer means from said first computer means over said network means, updating said image from said visual information, and associating said feel sensation information with said visual information, said second computer means further including means for developing physical feel sensations at said human/computer interface means using said feel sensation information, wherein said physical feel sensations are produced using actuator means included in said human/computer interface means (Woolston illustrates a multiple player interactive tactile feedback game all these above claimed features are inherent).

With regard to claims 17, and 27 Woolston was shown above in the means claim 12 to read on all the limitations of these more broad method claims because the method of using the Woolston means is inherent and in addition Woolston teaches wherein said first and second manipulandums are coupled to first and second computers, respectively, that are coupled to said computer network (figure 9a, items 708, 704 and 706).

With regard to claim 50 dependent on claim 12 Woolston teaches wherein position information describes a position of a body part (figure 10).

With regard to claim 24 dependent on claim 17 Woolston teaches wherein said first haptic feedback device includes an object representing a body part to be physically contacted by a user (figure 10).

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With regard to claim 30 dependent on claim 27 Woolston teaches wherein at least one of said first and second manipulandums represents a body part (figure 10).

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 2, 12, 17, 27, 38, 58, 75, 89, and 97 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 27, 28, 31 and 32 of U.S. Patent No. 6,028,593. Although the conflicting claims are not identical, they are not patentably distinct from each other because;

With regard to patent 6,028,593 claims 27, 28, 31 and 32 they teach;

27. A computer system for simulating the spatial interaction of **a displayed first simulated object with a displayed second simulated object in a computer-simulated spatial environment** such that the user is provided with a force feedback that realistically represents said interaction, comprising: **a processor** for executing a simulation including **a first simulated**

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object, said simulation being configured to implement the motion of said first simulated object in response to motion of **a physical object of an interface device** controlled by a user, wherein said physical object has a physical position in a physical environment, and wherein a position control mapping between said simulated location of said first simulated object and said physical position of said physical object is created, said simulation being further configured to generate **a second simulated object** having boundaries such that said second simulated object impedes the simulated motion of said first simulated object when the trajectory of said first simulated object intersects said boundaries of said second simulated object; **a display device** for viewing the location and motion of said first simulated object and said second simulated object; and **a force feedback mechanism** configured to impart to a user of said computer system **a physical sensation** that corresponds to the simulated physical interaction of said first simulated object with said second simulated object when the trajectory of said first simulated object intersects the boundaries of said second simulated object, wherein said interaction is determined by examining a current location and a previous location of said first simulated object to determine said trajectory, and wherein said position control mapping between said physical object and said first simulated object is broken during said interaction when providing said physical sensation.

28. The computer system of claim 27, wherein said force feedback mechanism is configured to generate a restoring force that is proportional to the magnitude by which said mapping is broken when said first simulated object intersects said boundaries of said second simulated object.

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31. The computer system of claim 28, wherein said second simulated object can be moved within said simulation and on said display device.

32. The computer system of claim 31, wherein said second simulated object moves on said display device during said simulation in response to manipulations of **a second physical object of a second interface device** by said **second user**, said second interface device being coupled to **a second computer system** coupled to said computer system through **a network interface**.

(Note figure 20 and columns 47 and 48 in 6,028,593 illustrates and supports this above patent claim language in meaning to the claim words)

With regard to application 9/153,781 claim 2 it teaches;

2. A system comprising: **a first computer** coupled to **a network**, said first computer comprising **a first visual display** and **a first interface device** capable of providing a first computer input, said first interface device comprising **an actuator** capable of providing tactile sensations in response to a haptic feedback signal provided by said first computer, said first computer developing **a first image in a first gaming environment** on said visual display that is associated with first stored tactile sensation information, wherein said first computer produces said first image and said haptic feedback signal based at least in part on information received from **a second computer** and based on at least in part on said first computer input, and said first computer produces said first image and said haptic feedback signal based at least in part on game information received from said second computer; and said second computer coupled to said network, and comprising **a second visual display** and **a second interface device** capable of

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providing a second computer input, said second interface device comprising an actuator capable of providing haptic feedback in response to a haptic feedback signal provided by said second computer, said second computer developing **a second image in a second gaming environment** on said visual display substantially simultaneously with said development of said first image in said first gaming environment, said second image associated with stored tactile sensation information, wherein said second computer produces said second image and said haptic feedback signal based on information received from said first computer and based on second computer input.

It is obvious that the application claim is merely directed towards an obvious intended use of the patent claims 27, 28, 31 and 32 which is directed towards gaming because both claims have all the same structural limitations as illustrated above and broad functions.

With regard to application claims 12, 17, 27, 38, 58, 75, 89, and 97 since patent 6028593 was shown above in regards to apparatus claim 2 to read on all the limitations, these more broad method and apparatus claims are also obvious.

Allowable Subject Matter

6. Claims 3-8, 11, 13-15, 18-23, 25, 28, 29, 31, 33-37, 39-49, 51-56, 59-70, 72-74, 76, 78-82, 84-88, 90, 92-96, 98-100 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Bell whose telephone number is (703) 306-3019. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Saras, can be reached at (703) 305-9720.

Any response to this action should be mailed to: Commissioner of Patents and Trademarks
Washington, D.C. 20231
or faxed to: (703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist). Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Paul Bell
Paul Bell
Art unit 2675
24 February 2003

Chanh Nguyen
CHANH NGUYEN
PRIMARY EXAMINER